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ABSTRACT

A conceptual framework and a unique data collection technique are proposed as a means for studying the relationship between cognitive structure and political awareness in children. Most researchers have dealt with cognitive development and political socialization research by examining children in different grade levels at one point in time. However, in this study, the same children are interviewed at three different points in time: pre-Watergate, during Watergate, and post-Nixon. The sample population included two urban school districts and six rural school districts, representing two contiguous counties located in the geographical region commonly known as the Ozarks. The project required the administration of interviews to students in the third, sixth, and ninth grades followed by a second set of interviews with the same students as fourth, seventh, and tenth graders and a third set of interviews with the these students as fifth, eighth, and eleventh graders. This study represents an attempt at longitudinal research on the acquisition of political orientations by children and suggests a key technique for determining whether childhood orientations have any effect on adult political actions. (Author/DE)

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COGNITIVE STRUCTURES, POLITICAL ENVIRONMENT, AND INCREASED POLITICAL AWARENESS IN CHILDREN: A DEVELOPMENTAL APPROACH*

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COGNITIVE STRUCTURES, POLITICAL ENVIRONMENT, AND INCREASED POLITICAL AWARENESS IN CHILDREN: A DEVELOPMENTAL APPROACH

Since the purpose of this paper is the exploration of "new socialization theories and analytic modes," the primary focus of the study will be on a conceptual framework and a somewhat unique data collection technique, and only secondarily concerned with concrete results. However, appropriate findings will be presented to help corroborate this particular approach to the development of cognitive structures in children.[1]

This is not the first study to acknowledge the applicability of Piagetian/Kohlbergian developmental principles as an appropriate framework for the analysis of childhood political behavior. Many students of political socialization have alluded to a cognitive development approach (cognitions);[2] several investigators have injected Piagetian references into inferences drawn from their own cross-sectional survey data; however, few students of political behavior have adopted a cognitive-developmental approach[3] to empirical analysis of childhood political orientations.[4]

Our study differs from the few who have relied on sequential, unified "stages" of development in two important aspects. First, instead of "just another" cross-sectional design for the study of children at relatively close age intervals for the purpose of observing "year-by-year shifts in political orientations,"[5] we have, essentially, interviewed the same children at three different points in time - pre-Watergate, during Watergate, and post-

Nixon.[6] Second, we have attempted to apply some basic Piagetian premises to the development - or non-development - of political attitudes in children.[7]

This is not meant to imply that we have completely forsaken the more traditional psychoanalytic (Freudian) perspective of significance to the so-called "first generation" political socialization investigators. During the first decade of political socialization research, investigation was guided, basically, by one of two orientations. The first, Hyman's sociological perspective,[8] has been said to have had the unfortunate side-effect of orienting researchers toward the measurement

> . . . of youthful political preferences, rather than [illuminating] psychological processes by which socialization agencies operated. . . .[Thus] research became the study of political preferences at particular points in childhood and adolescence, rather than the longitudinal study of political maturation.[9]

The second orientation emerged from and was guided by Easton's systems analytic framework, particularly his concept of diffuse support as a mechanism for the development of political orientations in children.[10]

Most of these earlier political socialization studies focused on the child's generalized affect for the political system per se or for the system as represented by its institutions or highly visible public officials (president and policemen, primarily). They inquired into the depth of the child's attachment to the political system (Easton's diffuse support), but seemed to ignore the child's evaluation of or support for public officials and/or

their practices or policies (Easton's specific support).[11] Most of the studies found that generalized affect was high across all age groups (via cross-sectional analysis) and seemed to appear early in life - long before substantive information was acquired. They also found that although navie idealization, as characterized by the very young, dropped with age and gave way to increased realism, confidence in the competence of government and its officals remained high.[12]

More recent research has suggested that perhaps we have placed too much emphasis upon the substance of youthful political attitudes rather than focusing on the processes of political maturation. After all, development by definition is dynamic and an emphasis on process orientation could possibly predict the "fluidity of youthful political attitudes."[13] Adopting this premise, we define political socialization along lines suggested by Merelman: political socialization is the process by which political orientations become established and internalized in childhood and adolescence.[14]

Before delineating our own procedures, it should be noted that few of the earlier studies take note of the fact that politics is of little, if any, real significance to the very young. However, perhaps this period of extra-ordinary political "happenings" has brought about an acute awareness of and interest in politics by the young that could be considered atypical. In this regard, Sigel has raised the question of the possible influence of the sociopolitical environment on the degree and rate of political

maturation of children under differing situations.[15]

Conceptual Framework: An Overview[16]

There are a variety of theories from related disciplines - particularly sociology and psychology - used to describe how people learn. Generally speaking, these can be broken down into three broad categories entitled (1) psychoanalytic (Freudian); (2) social-learning; and (3) cognitive-developmental. These three approaches subsume the basic theories of socialization. We are, of course, interested in the developmental view as originally presented by the Swiss "genetic epistemologist," Jean Piaget, and further explicated and extended by Lawrence Kohlberg, an American child developmentalist.[17] We have already defined political socialization as the process(es) by which political orientations become established and internalized in childhood and adolescence.

Our definition implies the existence of levels or stages of development. However, before progressing to Piaget's "stages" of intellectual growth and development, we should examine themes posited by Piaget and discuss some of his terminology. There seem to be at least four basic themes or principles to Piaget's theory of intellectual (mental) development:

> 1. Intelligence is conceived of as the possession of operations or rules of transformation.
> 2. Development is seen as an invariant passage from one stage of operations to the next.
> 3. Passage from one stage to the next is considered a function of both experience and maturation.
> 4. The operations that are part of intelligence and which change with one's development are logical structures that are neither dependent on nor derivative of language, per se.[18]

Assuming these basic principles, Piaget tries to account for how children develop cognitive and affective thinking.

To elaborate, we should first state that a distinction must be made between one's "capacity for intelligence" or thought processes, and one's possession of "knowledge or information systems" (cognitive structures). The possession of knowledge is not the same as one's capacity for knowing. The essence of Piaget's theory can be state simply: the child discovers conservation, that is, permanence across apparent change, with the aid of reason. Therefore, a child's intellectual growth is directly related to his awareness of "constancies" in society (both the social and physical world).[19] To discover these constancies, however, the child "must learn to distinguish between reality and appearance, between how things look and how they really are."[20] Thus, Piaget is arguing that there exists an "action-thought" continuum. That is, he is saying that knowledge about reality is not attributable entirely to experience - the action of things upon us - but also to reason - our mental actions upon things (e.g., actions upon objects, themes, or symbols). Likewise, Piaget claims that children progress from perception to images to operations, along the action-thought continuum. He states that the adaptive characteristics of the child are based on intellectual structures which utilize three basic concepts at <u>all stages</u> of development. These three concepts - assimilation, accommodation, and equilibration - all are tied in with the child's mental operations and cognitive structures which Piaget terms "schemata."[21] A schemata is a temporary structure which emerges

as a consequence of repeated actions (or thoughts). With the increasing age of the child, the complexity of the schematas reflect of more sophisticated mental structures.

For Piaget, the modes for knowing are termed assimilation and accommodation and are considered to be invariant and occur at all age levels and at all levels of mental development. Equilibration can be considered a higher order adaptive process which governs the relationship between assimilation and accommodation. Assimilation, which is considered the basic mode of knowing, transforms all incoming information (stimuli) so that it can fit into existing forms of knowledge (schematas). Elkind gives a "higher level" example of assimilation whereby adults often read newspaper columnists or listen to news commentators who reflect their own opinions. He states that "material consistent with one's own point of view is easily assimilated."[22]

Accommodation occurs when existing structures are changed to incorporate new information. In effect, the accommodative mode of knowing indicates a failure of one's ability to assimilate new information; thereby, requiring the alteration of existing schematas or the development of new mental images. As already mentioned, equilibration governs the relationship between assimilation and accommodation. Equilibration leads to expanded forms of thought and broader ranges of assimilation. All of this is brought about by the action-thought process which is assumed to be the medium of exchange between the individual and his environment. This adaptation assumes the existence of cognitive structures which evolve

with age into new structures.[23]

In regard to cognitive and affective thinking, Piaget considers "affects" as emotional aspects of behavior, while he considers "cognitions" as intellectual activities of the mind. He has often said that cognitions and affects do not cause one another, but, instead, they interact in the development of higher structures. Piaget and Inhelder have written:

> There is no behavior patter, however intellectual, which does not involve affective factors as motives; but, reciprocally, there can be no affective state without the intervention of perceptions or comprehensions which constitute their cognitive structure. . . The two aspects, affective and cognitive, are at the same time inseparable and irreducible.[24]

Finally, the term "cognitive structures" refers, basically, to the mental organizations or abilities possessed by the child. When Piaget talks about a child being at a certain level of intellectual growth, he is merely saying that the child has developed a unique set of mental abilities that distinguish him from younger children. Elkind sums these functions up by stating that "assimilation and accommodation operate through and with cognitive structures and can be considered their motive power."[25] This, then, leads us to a brief discussion of Piaget's "stages" of cognitive development.

Piaget proposes that mental growth -- adaptive thinking and action - develops in a sequence of stages related to age. Each of the stages are considered to have evolved from each lower stage by way of the process described above. By assimilation, accommodation, and equilibration, each stage consists of new mental abilities which set the limits and determine the character of what can be learned

during that period.[25]

Although there are four primary stages in Piaget's theory, we will focus, after briefly discussing the formalization process of the first two stages, on the third and fourth stages because of the ages of the children involved in our study. Piaget believes that the notions of stages and overall structures are necessarily bound together, that is, each has a meaning to the other which is not only logical but also formal. Despite their formalization, these structures have essentially biological meaning in the sense that the order of the stages is constant and sequential. Each stage is necessary for the following one. Piaget says that if this is not the case, then we cannot talk about stages. Obviously, the ages at which different children reach a particular stage may vary. In some social environments the stages are accelerated, whereas in others they may be retarded. This differential development shows that stages are not purely a question of the maturation of the nervous system but that they are dependent as well upon interaction with the social environment and with experience in general. The order of the appearance of the stages, however, are invariant.[26]

Kohlberg takes a similar position in regard to stage development. He states that the concept of stages "implies an invariant order or sequence of development."[27] He also points out that cultural and environmental factors or innate capabilities, such as retardedness, may make one child or group of children reach a given step in the developmental process before another group of children. All children, however, still go through the same sequence of stages

regardless of environmental or cultural factors. For example, he states that culturally deprived ghetto or other sub-cultural children may go through certain sequences of stages more slowly than middle-class children, even though the two groups may have been matched on "psychometric intelligence."[28]

The first stage, then, is the "sensorimotor" period which occurs before the advent of language (usually 0-2 years). This period is characterized by what is called "sensorimotor intelligence," which, according to Piaget, is a type of intelligence resulting in a certain number of performances, such as the evolution of the abilities necessary to construct and reconstruct objects. This "reconstruction" is accomplished with the aid of an "elementary form of reasoning." Such reasoning, says Piaget, is accomplished without the aid of language and by means of "mental images."[29]

The second stage (usually 2-7 years of age), is called the "pre-operational" stage or the period of "pre-operational thought." The child, at this time, is capable of having "representational thought by means of the symbolic function." At the beginning of this stage the child tends to identify words and symbols with the objects they are intended to represent. That is, the child believes that "names" are as much a part of the objects as are their shape or color. By the end of this period, however, the child can clearly distinguish between words and symbols and what they "represent."[30]

The third major period, and the first one to be of major significance to our study, begins around the age of seven or eight. This stage is characterized by the inception of "operations," that

is, the child acquires what Piaget calls "concret operations," or internalized operations which permit the child to do in his head what he would have had to do by actual manipulation before. In other words, the period of concrete operations permits the child to think about "things." For example, during this period the child is capable of preforming different functions on objects, such as, classifying them, ordering them, establishing correspondence between them, using numerical operations on them, or perhaps, even measuring them from a spatial point of view.[31] These operations remain concrete until the child approaches the age of eleven or twelve years. Then, at approximately this age, the fourth major period begins.

During this last stage, there gradually emerges what Piaget calls "formal operations." These newly acquired operations, in effect, permit the adolescent to think about his thoughts. By this, Piaget means that the operations are no longer applied solely to the manipulation of concrete objects, but now cover "hypotheses and propositions that the child can use as abstractly and from which he can reach deductions by formal or logical means."[32] It is thought that only at this stage, for example, can the "political cartoon" be understood and appreciated. According to Elkind, no new "mental systems emerge after the formal operations, which are the common coin of adult thought. After adolescence, mental growth takes the form . . . of a gradual increase in depth of understanding."[33]

In summary, we might say that, generally, the child in our study will use concrete operations; that is, he will be able to

reason in terms of objects, but not in terms of hypotheses.[34] As Elkind as so aptly stated, "You cannot reason with a child." At least not with a young child because the ability to reason abstractly or hypothetically requires genetic maturity - i.e., experience that makes it possible for one to translate actions into thought, intelligence - i.e., logical reasoning capabilities, and some degree of structures and organizations of informational systems, as well as an ability to comprehend cause-effect relationships.[35] If a child is not able to reason abstractly, he will be incapable of examining political facts and applying his reasoning abilities to these events. Until he has reached the formal operations stage he will be incapable of putting himself in someone else's place (empathize with him) for purposes of judging the other individual for his actions. At the formal operational stage, however, he should be able to correlate his reasoning abilities with experience. He should be able to separate "truth from opinion." Finally, since cognitive development is closely related to maturity, and since Piaget uses age and school grades as indicators of cognitive progression, we believe that our "telescoped longitudinal" study will provide us with information on the development of political orientations in children that could only be inferred from a cross-sectional study. We believe, also, that the application of this framework for analysis will permit us to critique some of the major criticisms leveled at political socialization research.[36] We do not mean to imply that criticism of one's work is inappropriate, because it is only by this means that the sub-field will

be able to develope an integrated body of literature. Likewise, we realize that the Piagetian framework is not a panacea. It does not attempt to subsume all theories of socialization, i.e., learning in children. However, combined with our data collection technique, it does help in answering some of the basic questions aimed at current research efforts. The ideal, of course, would be to be able to observe a number of children on a daily basis and to be able to interview them personally. It is possible that in regard to political orientations this will never be feasible. Therefore, we have, in contrast to Piaget, attempted to collect some data on a goodly number of the same children as opposed to collecting a great deal of data on a few children. Our method, described below, is, indeed, a compromise at best. At worst it is a mere attempt to collect data on children during a time of unprecedented political turmoil and to measure the impact of these history-making political events on the development of attitudes/opinions in children.

The Study

Researchers have most frequently dealt with the "developmental" problem in political socialization research by examining children at different grade levels at one point in time. It was assumed that any differences found between children in the lower grades and those in the upper grades were differences which constituted developmental patterns. It has also been assumed that by examining patterns of childhood development we might better explain adult political actions - if, in fact, youthful orientations do persist to affect

later political behavior. Jaros has summed up the general research orientations with two basic questions: "What is the impact of political socialization on the political system?" and "How are critical values learned by children?"[37]

If this is indeed the general orientation of political socialization research, then we believe that perhaps some of the wrong questions are being asked, for this orientation all but ignores the impact of political events upon the development of political attitudes in children. As stated by Sigel, this orientation focuses on changes associated with progression in school and attributes them to "growing cognitive maturity" as though the child grows and develops oblivious of the political world or as though the political world is static.[38] Elkind has leveled the same criticism at education by charging that educators "most often focus on the static aspects of concepts . . . (while) the dynamic features of concepts are for the most part bypassed in the classroom."[39] In regard to politics, information on the impact of historical events (changing world?) on children's political thinking and on the interaction of the changing individual with the changing political system is sparse. The question to be asked is: "Are children impervious to crises type political events which have surrounded them on a regularized basis -- regularized in the sense that since the early sixties politically relevant events, such as rioting in many of our large cities, our involvement in Vietnam, three political assassinations, the resignation of a Vice-President under duress, and finally, Watergate and all of its ramifications, including the resignation

of a President of the United States, have appeared with a great deal of frequency?"

As stated earlier, Sigel has raised the question of the possible influence of the social and political environment on the degree and rate of political maturation of children. The point is, of course, that we can only identify developmental (learning) patterns by examining the same people over a specified period of time. Thus, "longitudinality" is said to permit the analysis of "gross" (individual) as well as "net" (marginal) change in samples or populations, and has the "added power of inference, derived from repeated measurements on the same respondents."[40] The relative absence of longitudinal research on the acquisition of political orientations by children remains one of the most crucial problem areas in the development of socialization theory.[41] It is unrealistic, however, to expect extensive longitudinal research efforts on how we are socialized to politics. Longitudinal studies are difficult to conduct in that they are more costly than cross-sectional research, the length of time required for completion is considerably longer, and the researcher is frequently unable to control attrition in the original survey group when administering subsequent interviews.[42] It has been said, however, that the key to whether childhood orientations have any affect on adult political actions requires comparative research - not necessarily comparisons between nations or across cultures,

> but comparisons of the same individuals over time. Put simply, we need to measure people's political orientations while they are children and then again

> when they are (adolescents and) adults. If there are relationships between the . . . sets of measurements, we are justified in inferring that the childhood orientations persist. If there are no relationships, it appears that childhood socialization is not relevant for adult political behavior and that research in this area is a waste of time.[43]

Recognizing these limitations, this study represents a multi-stage project[44] on the development of political orientations of children in an area of the country that encompases a recognized subculture. The project is in no way meant to be a definitive study of the developmental stages of political orientations from child to adulthood. However, by combining the study of individuals over a period of time and at successive stages with the more traditional cross-sectional methods of survey research, we have "telescoped" a considerable time-span into a relatively short period of time. The project, as originally proposed, required the administration of paper-and-pencil interviews to students in the third, sixth, and ninth grades, followed by a second "wave" of interviews with essentially the same students as fourth, seventh, and tenth graders, and finally a third "wave" of interviews with the students as fifth, eighth, and eleventh graders. This final phase was to include in-depth personal interviews (using some of Greenstein's semi-projective hypothetical stories)[45] with a specifically selected random sample of the students at the least three grade levels. The cross-sectional nature of the first stage was aimed at making the study more efficient by utilizing the primary interviews as an "hypotheses-seeking" study which

had as its goal the generation of hypotheses about the processes of political development. The follow-up interviews - at twelve month intervals - were guided by suggestions from the cross-sectional study and supplemented with additional information from school officials and, where possible, the students' files.[46]

EXAMPLE TABLE

Since much of the previous work in political socialization research has demonstrated the importance of the elementary school years in the growth and development of political orientations, this project was limited to certain age groups (grades). However, it should be noted that although interviews were conducted in grades through the eleventh, our primary focus was on the grades third through the ninth.[47] The ninth grade was important for this study since by Arkansas Statute it is at this point in time that the student is introduced to a formalized course in "civic education." It should be noted also, that a primary concern of the study was the selection of grade rather than age as a major independent variable. Several authors have noted that, generally speaking, "grade in school is highly correlated with age."[48] We found that in our purposive sample this correlation varied from .88 to .94.[49] In accordance with Piaget, then, the analysis of the data selected assumes that grade in school and chronological age are related to basically the same function; that is, with each grade level examined, the child has gained additional

experience, permitting the assimilation of new or altered schemata by means of the processes elaborated above, and has been subjected to more formal and informal (according to Piaget and Kohlberg, the peer group is of primary significance during the concrete and formal operation stages - our data has yet to confirm this hypothesis) socializing agents, and therefore, has developed to a point where he can "cognize" more complex political knowledge, such as, important political issues, a better comprehension of our political institutions, and an increased awareness of significant (to the political socialization researcher, anyway) political events.

Another major concern was the selection of the research groups in such a way that it would facilitate the analysis of specific variables for comparative purposes rather than the taking of a random sample from the more encompassing geographical region. Greenstein and Tarrow[50] have effectively argued against this more traditional approach to data collection. As a practical matter, however, it is considerably easier to get permission to administer a questionnaire to three or four classes in a school than to administer the same questionnaire to a much smaller sample selected on a simple or stratified random basis, the latter being much more disruptive of the school routine. Therefore, large-scale survey studies seldom make use of these techniques, but, instead, frequently use clustering methods similar to those adopted for this project.

The Sample

The sample from which this study proceeds was taken from a larger regional project incorporating thirty-three schools (twenty-six elementary and seven junior high schools) representing sixteen separate school districts in north and west Arkansas. The specific emphasis of this study is on only those schools in which the Civic Education Questionnaire (CEQ) was administered to all of the students in the grades selected: CEQ I to the third, sixth, and ninth grades; CEQ II to the fourth, seventh and tenth grades; and CEQ III to the fifth, eighth, and eleventh grades. This limits our population to two "urban" school districts and six rural school districts, representing eleven elementary, eight junior high and four high schools located in two contiguous counties located in the geographical region commonly known as the Ozarks. In actual interviews, it includes approximately 2,000 (depending on missing data) of the more than 4,200 initial interviews completed for the entire region. In the school districts where there were more than four elementary schools, a socioeconomic profile was prepared on the school district and the specific schools to be included were determined by a "stratification" method which best represented the entire community according to class (socioeconomic status). For this study, the SMSA of Fayetteville/ Springdale was the only area with school districts where this procedure was applied.

It should be noted, also, that CEQ I contained sixty-three forced-choice and two open-ended questions, while CEQ II contained

of 72 forced-choice and 17 open-ended questions. This is not as disproportionate as it may appear. A primary focus of CEQ III is on information sources (specifically mass media vs. the more traditional socializing agents), therefore, several of the open-ended questions were followed by two media-source questions. In all, forty-two questions with identical word structure were retained over the three-year period.

Measurement and Expected Results

It should be noted that although race is an important variable in the larger study which includes one school which is 95% black and another school which has a 70% to 30% black to white ratio, respectively, it is not a variable here. Less than 1% of the children in any school district (and absolutely none in the rural sub-cultural sample) was black. Therefore, grade (used as a surrogate for age), sex, urban/rural location, information sources (both informal and formal), etc. are the primary variables of concern.

Results will be mentioned only in passing. Our method is the focus of this paper. We are comparing/contrasting the students at three different grade levels (a total of nine grades cross-sectionally). And the "urban/rural" dimension is considered a constant or control variable. Our initial data analysis always begins with simple frequency distributions and mean comparisons (where appropriate) in order to suggest possible hypothesis and relationships among our variables (see example table for data

presentation format). Next, we cross-tabulate our results for a single year by grade for simple inter-grade comparisons (as opposed to the intra-grade emphasis of the frequencies). Finally, we factor the data by totals, sub-totals urban and rural, and by grade within the sub-totals.[51] The primary concern here is the loadings and strength of loadings on the vectors, the identification of single and/or multiple dimensions, and the reduction of the data to these more manageable dimensions. We are interested, of course, in observing those variables which load on the same vector, particularly if the sub-total results correspond highly with the grade results within each sub-total. Another concern here is an attempt to identify multidiemnsional variables as opposed to unidimensional variables (used in the sense of factor loadings here) for the possible construction of indexes and scales respectively. With the publication of Jacob's article[52] we have become quite concerned with the "traditional" use of scales for the measurement of "attitudes" in children. First of all, we believe, with Piaget and associates that children <u>do not</u> think like adults and therefore many of the scales used for the earlier political socialization studies were not measuring what they intended to measure.

An example of the type of results expected is evident with responses to our open-ended question (CEQ III) "What is Watergate?" Third grade children, if they responded to this question, tended to do so in a more concrete operational manner than older children.

For example, "a building," "tapes," "bugging," "Nixon's problems," etc., were typical responses for the younger children, while the older (particularly the eighth and ninth, and tenth and eleventh grades) were more likely to give "abstract" interrelated responses, such as, "the breaking into the Watergate, and the President's tapes," or "the cover-up and resignation of President Nixon."

Since CEQ III data is still being collected, particularly in the rural areas, it is difficult to present concrete examples of development across time at this present time. However, an example of the type of initial analysis (longitudinal and grade-across-time) is appended. The collection of data for CEQ III was delayed by natural circumstances.[53]

NOTES

1. We would like to note at the outset that any definition we offer of "cognitive structures" is tenuous at best. Piaget himself states that we can only assume by observing behavioral patterns that mental structures exist since

> the structures are unconscious. They are expressed in regular forms of responses that we believe are discovering in the subject's behavior. We also believe that if the underlying structures did not exist, we would not be able to explain such behavior. But the subject himself is not aware of these structures. . . .He simply uses them.

Jean Piaget, "The Theory of Stages in Cognitive Development," in Donald R. Green, Marguerite P. Ford, and George B. Flamer (eds.), Measurement and Piaget (New York: McGraw-Hill Book Company, 1971), 3.

2. "Cognitions" is added here since the author holds that most studies that have alluded to "cognitive development" have defined cognitions. An accepted definition of cognition is: "the process by which an individual comes to know and interpret his environment. Cognition comprises all the processes by which an individual acquires knowledge, including perceiving, thinking, remembering, wondering, imagining, generalizing, and judging." See George A. and Achilles G. Theodorson, A Modern Dictionary of Sociology (New York: Thomas Y. Crowell Company, 1969), 56.

3. Kohlberg states that most research of this nature is not guided by a theory, but by an approach labeled "cognitive-developmental." He says that the label refers to "a set of assumptions and research strategies common to a variety of specific theories of social and cognitive development." Lawrence Kohlberg, "Stage and Sequence: The Cognitive-Developmental Approach to Socialization," in David A. Goslin (ed.), Handbook of Socialization Theory and Research (Chicago: Rand McNally College Publishing Company, 1969), 347.

4. These works can be classified into three basic categories: political socialization studies which make reference to the need to explore cognitive development approaches; political socialization studies which, although not longitudinal, adopt some basic developmental assumptions and make references to possible inferences that might be drawn from the child development literature; and text/readers, or "overview" studies of political socialization findings and theories which are based on the authors' review of previous data and not necessarily data collected and analyzed for that particular publication.

It would be futile, at this point, to attempt to enumerate titles for each category. The reader, however, is directed to Jack Dennis, Political Socialization Research: A Bibliography (Beverly Hills, Cal.: Sage Professional Papers in American Politics, 04-002, 1973). Unfortunately, many studies on child development (specifically cognitive development) with relevance to political socialization are not included in the bibliography (with some exceptions, e.g., studies dealing with legal competence and moral judgment/moral development). This may be due either to the assumption that child development studies are not thought relevant to this particular bibliography, or because many of the most relevant (political) studies are too recent (the Dennis' publication reviews most of the literature up to and including some 1972 publications).

5. David Easton and Jack Dennis, Children in the Political System: Origins of Political Legitimacy (New York: McGraw-Hill Book Company, 1969), 421.

6. More will be said on the methods and procedures of data collection; however, initial data were collected during March 1973 (before "Watergate" really broke as a viable issue), with the second and third "wave" interviews conducted during March 1974 and late February and March of 1975. Also, appended, is an example of a format for frequency and/or central tendency distribution presentation of the longitudinal and/or grade-across-time data for initial comparative purposes.

7. We do not mean to circumvent the "attitude/non-attitude" debate. However, we believe that it is beyond the scope of the present study, particularly with respect to our interpretation of the processes involved in the sequential stages of child development, to actively pursue the argument.

For some of the most appropriate recent references concerning the dialouge, see Philip E. Converse, "The Nature of Belief Systems in Mass Publics," in David E. Apter (ed.), Ideology and Discontent (New York: The Free Press, 1964), 238-245; Converse, "Attitudes and Non-Attitudes: Continuation of a Dialogue," in Edward R. Tufte (ed.), The Quantitative Analysis of Social Problems (Reading Mass.: Addison-Wesley Publishing Company, 1970), 168-189; Bernard Hennessy, "A Headnote on the Existence and Study of Political Attitudes," in Dan D. Nimmo and Charles M. Bonjean (eds.), Political Attitudes and Public Opinion (New York: David McKay Company, 1972), 27-40; John C. Pierce and Douglas D. Rose, "Nonattitudes and American Public Opinion: The Examination of a Thesis," American Political Science Review, 68 (June 1974), 626-649; Converse, "Comment: The Status of Nonattitudes," Ibid., 650-660; Rose and Pierce, "Rejoinder to 'Comment' by Philip E. Converse," Ibid., 661-666; and Norman H. Nie with Kristi Andersen, "Mass Belief Systems Revisited: Political Change and Attitude Structure," Journal of Politics, 36 (August 1974), 540-591, among others. The last two citations present the most comprehensive and referenced discussions of the basic issues and differences. One study that attempts to tie ideological foundations in with a cognitive-developmental framework is Richard M. Merelman, "The Development of Political Ideology: A Framework for the Analysis of Political Socialization," American Political Science Review, 63 (September 1969), 750-767. Nie states that the "empirical study of ideology in the mass public has proceeded along three lines." Nie with Andersen, op. cit., 541. The Merelman study and the present study would most likely be placed in their third category, i.e., those attempts "to probe for deeper and more personal ways in which citizens make order of the political world around them." Ibid.

8. Herbert H. Hyman, Political Socialization: A Study in the Psychology of Political Behavior (New York: The Free Press, 1959); see also, Fred I. Greenstein, Children and Politics (New Haven: Yale University Press, 1965).

9. Richard M. Merelman, "The Adolescence of Political Socialization," Sociology of Education, 45 (Spring 1972), 136. My emphasis. Merelman's critique of the present state of political socialization research is one of the best - of many - critiques to be published during the past few years.

10. David Easton, A Systems Analysis of Political Life (New York: John Wiley and Sons, 1965), particularly chapters 16 - 20. Although Easton's concept of diffuse support is relevant to the overall theoretical framework from which the present study is taken, it is of little significance here. However, it might be useful to note that Easton's political orientations, which are defined as "all perceptions (cognitions and knowledge), affect (feelings and attitudes), and evaluations (values and norms) through which a person relates himself" in social space, are directed toward three major objects or analytic levels of a political system: (1) the political community, defined as a group of persons who have agreed to solve their common disputes through a shared political structure; (2) the regime, or that part of the political system which includes its constitutional order, the "rules of the game," and governmental institutions and decision-making processes; and (3) the authority, or government, which refers to role-occupancy or decision-makers who formulate and administer the day-to-day decisions for a society. These political leaders have been the focus of many political socialization studies and are frequently thought of as the "administration," such as the "Nixon Administration" for this study. For the overall approach see Kenneth D. Bailey, The Impact of Political Environment on the Development of Political Orientations in Children: A Cognitive-Developmental Approach (Piaget/Kohlberg). Unpublished dissertation, University of Maryland, 1975.

11. Easton, op. cit. Some research has begun in the policy oriented or "specific" support area. It should be noted that this research is aimed at a different level of analysis (Easton's objects) than the "political events" studies such as Roberta S. Sigel, "An Exploration into Some Aspects of Political Socialization: School Children's Reactions to the Death of a President," in M. Wolfenstein and G. Kliman (eds.), Children and the Death of a President (Garden City, NY: Doubleday, 1965). For policy oriented studies see, Richard M. Merelman, "The Development of Policy Thinking in Adolescence," American Political Science Review, 65 (December 1971), 1033-1047; Merelman, "The Structure of Policy Thinking in Adolescence: A Research Note," American Political Science Review, 67 (March 1973), 160-165; and Robert L. Savage and Rebecca Webster, "Images of Poverty: A Developmental Study of the Structure of Policy Thinking of American Citizens" (Prepared for delivery at the 1975 Annual Meeting of the Southwestern Political Science Association, Hilton Palacio del Rio, San Antonio, Texas, March 27-29). All three studies focus on a single issue - poverty; however, the Savage study employes a Q-sort technique for identifying "thought dimensions," while Merelman relies strictly on in-depth personal interview with a limited number of students and an elaborate coding system.

12. Much of the above is drawn largely from Roberta S. Sigel and Marilyn Brooks, "Becoming Critical About Politics," in Richard G. Niemi and Associates, The Politics of Future Citizens (San Francisco: Jossey-Bass Publishers, 1974), 103-125. Although the Sigel Study began as a longitudinal study, the data reported by Sigel and Brooks is "grade-across-time" comparisons whereby students in grades are compared at two different points in time. See also, Kenneth D. Bailey, "Political Interest, Issue Saliency, and Increased Awareness Among Children: An Exploration into the Impact of History-Making Political Events" (Prepared for delivery at the 1975 Annual Meeting of the Arkansas Political Science Association, Sam Peck Hotel, Little Rock, February 21-22), a slightly revised version.

13. Merelman, "The Adolescence of Political Socialization," op. cit., 153. See also, Pauline M. Vaillancourt, "Stability of Children's Survey Responses," Public Opinion Quarterly, 37 (Fall 1973), 373-387.

14. Merelman, "The Adolescence of Political Socialization," op. cit., 156.

15. Roberta S. Sigel, "Political Socialization: Some Reflections on Current Approaches and Conceptualizations" (Prepared for delivery at the Annual Meeting of the American Political Science Association, New York, September 6-10).

16. It is essential that the conceptualization of a Piagetian framework for analysis be confined to an "overview" for two basic reasons: first, Piaget's work is quite comprehensive, to say the least, and difficult to to present; second, as of 1969, Elkind states that three books and 203 articles had been written on Piagetian processes and procedures. Many more books and articles have since appeared.

17. The works by and on Piaget are almost endless. However, for some basic references see especially Jean Piaget, The Origins of Intelligence in Children (New York: W. W. Norton, 1952); The Construction of Reality in the Child (New York: Basic Books, 1954); and The Moral Judgment of the Child (New York: The Free Press, 1969). See also, Piaget and Barbel Inhelder, The Psychology of the Child (New York: Basic Books, 1969); J.H. Flavell, The Developmental Psychology of Jean Piaget (New York: D. Van Nostrand, 1963); Hans G. Furth, Piaget and Knowledge (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969); Inhelder and Piaget, The Growth of Logical Thinking from Childhood to Adolescence (New York: Basic Books, 1958); and for a more comprehensible book, see Herbert Ginsburg and Sylvia Opper, Piaget's Theory of Intellectual Development: An Introduction (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969).

18. J. McV. Hunt, "The Impact and Limitations of the Giant of Developmental Psychology," in David Elkind and John H. Flavell (eds.), Studies in Cognitive Development: Essays in Honor of Jean Piaget (New York: Oxford University Press, 1969), as cited in Wilbur L. Johnston, Jr., "Children in the World: Their Images of Selected Foreign Policy Issues and Their Perceptions of Various Aspects of International Political Systems." Unpublished dissertation, University of Maryland, 1973. Much of what follows is based on Johnston and David Elkind, Children and Adolescents: Interpretive Essays on Jean Piaget (New York: Oxford University Press, 2nd ed., 1974).

19. Elkind, Children and Adolescents, op. cit., 4.

20. Ibid.

21. Ibid., 10.

22. Ibid., 6.

23. Johnston, op. cit., 46-50; Elkind, op. cit., 7.

24. Inhelder and Piaget, The Growth of Logical Thinking. . . , op. cit., 338.

25. Elkind, op. cit., 11; see also Inhelder, "The Concept of Stages in Child Development," in Paul M. Mussen, Jonas Langer, and Martin Covington (eds), Trends and Issues in Developmental Psychology (New York: Holt, Rinehart and Winston, 1969), 4.

26. Green, Ford and Flamer, Measurement and Piaget, op. cit., 7; a note should be added here in regard to this article by Piaget on the theory of stages in cognitive development and the interpretation of this concept by psychologists and political scientists alike. One specific instance in which this author believes Piaget's "stage" concept has been misinterpreted by a political scientist is, Dan D. Nimmo, Popular Images of Politics (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974), particularly, his chapter 3, "Adopting Political Images." Nimmo presents a "developmental" view of how people adopt images based on Piaget and Kohlberg. However, when he gets to the point of discussion of the specific stages, he cites four: "infancy, assimilation, accommodation, and adaptation." This author contends that Nimmo is confusing "functions" which Piaget and Kohlberg believe take place during ALL stages of development with stages (for Piaget, sensiormotor, preoperational, concrete operations, and formal operations). See this author's discussion of what Nimmo terms "stages as functions in the four stages or Piagetian perioes. Nimmo, Ibid., 53-56.

27. Kohlberg, op. cit., 355.

28. Ibid., 357. In addition, see the extensive bibliography at the end of Kohlgerg's "Stage and Sequence. . ." article. It should be noted, also that Kohlberg has conducted extensive experimental research dealing with many different cultures and subcultures.

29. Elkind, op. cit., 11; and Johnston, op. cit., 54.

30. Elkind, op. cit., 11-12.

31. Ibid.; see also, Irving E. Sigel and Frank H. Hooper (eds). Logical Thinking in Children: Research Based on Piaget's Theory (New York: Holt, Rinehart and Winston, Inc., 1968); and the many references to Piaget and Piaget and Inhelder, above.

32. Johnston, op. cit., 61-63.

33. Elkind, loc. cit.

34. Johnston, op. cit., 63.

35. Ibid.

36. Major articles of criticism, in addition to the "attitude/nonattitude" references above, are: Pauline M. Vaillancourt, "Stability of Children's Survey Responses," Public Opinion Quarterly, 38 (Fall 1973), 318-384; David Marsh, "Political Socialization: The Implicit Assumptions Questioned," British Journal of Political Science, 1 (April 1971); William Schonfeld, "The Focus of Political Socialization Research: An Evaluation," World Politics, 23 (April 1971); Fred I. Greenstein, "A Note on the Ambiguity of 'Political Socialization': Definitions, Criticisms, and Strategies of Inquiry," Journal of Politics, 32 (1970); Donald D. Searing, Joel J. Schwartz, and Alden E. Lind, "The Structuring Principle: Political Socialization and Belief Systems," op. cit.; Jack Dennis, "Major Problems of Political Socialization Research," Midwest Journal of Political Science, 12 (M1968); among others.

37. Dean Jaros, Socialization to Politics (New York: Praeger Publishers, 1973), 22.

38. Sigel and Brooks, op. cit., 104; Bailey, "Political Interest, Issue Salience, . . ." op. cit.

39. Elkind, op. cit., 13.

40. Robert G. Lehnen and Gary G. Koch, "Analyzing Panel Data with Uncontrolled Attrition," Public Opinion Quarterly, 38 (Spring 1974),
41. As Andrain has pointed out, it should be noted that Piaget is concerned "mainly with characteristics of children as a whole instead of individual differences." Charles Andrain, Civic Awareness in Children (New York: Charles Merrill, 1969), 63, my emphasis.

41. Very little work has been conducted on longitudinal development of attitudes either at the child or the adult stages. The best known, is probably Theodore M. Newcomb, "Attitude Development as a Function of Reference Groups: The Bennington Study," in Eleanor E. Maccoby, et. al., (eds.), Readings in Social Psychology (New York: Holt, Rinehart and Winston, 3d. ed., 1958); and Newcomb, et. al., Persistence and Change: Bennington College and Its Students After Twenty-five Years (New York: John Wiley and Sons, 1967). Most "longitudinal" studies have been one of two types: either of the Newcomb type where people are interviewed at two widely separated points in time or the studies that are carried out with only a few individuals (usually in psychology), thereby, in effect converting the observations into mere collections of "case studies" or "histories" which may be valuable in themselves, but invalid as statistical works for developing scientific generalizations (a criticism frequently leveled at Piaget).

42. Lehnen and Koch, op. cit.; see especially their discussion on the "supplemented marginals approach to incomplete panel data" 41-51. Our study has a slightly different problem. Instead of "attrition" (except for the University city of Fayetteville) we have to be concerned, especially with the advance of the students to Junior and particularly Senior High Schools, with the influx of students and not the attrition rate.

43. Dean Jaros, Socialization to Politics, op. cit., 22.

44. The proposal for the original project was originally submitted by the author to the National Institution on Education (not funded) under the title: "The Impact of Political Environment on the Development of Political Orientations in Children: A Developmental Approach to a Recognized Subculture," 1973.

45. See Fred I. Greenstein and Sidney Tarrow, "Comparative Political Socialization: Explorations with a Semi-Projective Procedure," (San Francisco: Sage Publications in Comparative Politics, 01-009, 1970); and other relevant articles by Fred Greenstein and Associates using this techinque. The most recent article is, "The Benevolent Leader Revisited: Children's Images of Political Leaders in Three Democracies," (forthcoming). One note of interest, however, is that experimentalists (including Piaget) have found that responses differ in children when they are asked about "hypothetical" incidents or to relate to "hypothetical" stories than if they are asked about real persons, objects, or things. See Elkind, in Sigel and Hooper, op. cit.

46. The sequence of interviews have already been mentioned. It should be mentioned, however, that although we received a tremendous amount of cooperation from the principals of the schools, we were not permitted to add IQ scores to our questionnaires. One school, however, uses a "tracking" system (the fifth grade, for instance, is divided into five groups from remedial to greatly advanced students) and we have been permitted to keep track of these students as third, fourth and fifth graders.

47. This again, is related to the problem of keeping track of students who have previously taken both of the CEQ questionnaires - not due, as explained, to attrition as much as the influx of other students from schools not originally included in our sample.

48. Both Easton and Dennis, op. cit., and Hess and Torney, op. cit., use this criteria. Our highest correlation was found in the SMSA, while some of the ages of children in the "sub-cultural" areas differed considerably within grades.

49. Included in footnote 48, above.

50. Greenstein and Tarrow, loc. cit.

51. The principal components technique of factor analysis with varimax rotation was used. Also, many of the Pearson's product-moment correlation coefficients calculated during the running of the program (SPSS version five) have been used where "dummy" variables have been established or "not sure" responses neutralized.

52. Herbert Jacob, "Problems of Scale Equivalency in Measuring Attitudes in American Subcultures," Social Science Quarterly, 52 (June 1971), 61-75.

53. A footnote was intended where "all students" was discussed. It was assumed that the absentee rate was no different on the day of the interview than any other day. In 1975, however, weather caused us to deliberately delay interviewing because of the closing of some of the schools. In our part of the country three consecutive snowflakes constitute a snow storm and the closing of the elementary schools, particularly.

ERRATA

(1) Preface footnote number 17 as follows: For a good succinct presentation of the three categories, see Sheilah R. Koeppen, "Children and Compliance: A Comparative Analysis of Socialization Studies," Law and Society Review, 4 (May 1970), 545-551. See also, J. McV. Hunt (cited in footnote number 18) for an excellent, and even more comprehensive overview (than Koeppen's) of Piaget's basic principles and a comparison of Piaget with several other "giants" in the field child development.

(2) Page 7, "pattern" in quote.

(3) Page 11, "empathize".

(4) Footnote number 36, citation for Dennis: (February 1968).